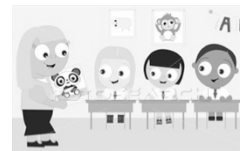




Why are we here?

Teaching is *typically* primarily
linguistic

We (as educators) talk
a lot!



Everything we do is mostly
audio



We explain...





Image Source:
<http://lmen.style.com/slideshows/mens-fashionshows/F2005MEN/D SQUAREMEN/RUNWAY/00320m.jpg>

Marzano, Norford, Paynter, Pickering, & Gaddy: Classroom Instruction That Works; Chapter 11 Nonlinguistic Representations



Cater to
students'
learning styles
& multiple
intelligences

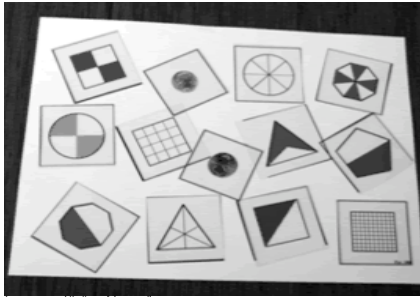
Visual/Spatial Learners



You prefer using
pictures, images,
and spatial
understanding



Washington crossing the Delaware River depicted by Emanuel Leutze



Using **Digital Images** in the classroom can help us to better engage our students...

"Real Classroom" Examples

Created By & Compliments to LuAnn Zielinski
Technology Integration Specialist
Franklin Public Schools

Learning Targets:

1. Explore ideas for how Digital Images can be used to enhance classroom learning.
2. Examine how these ideas can be used in **your** classroom.



Pyramids & Triangles

Capturing Classroom Activities

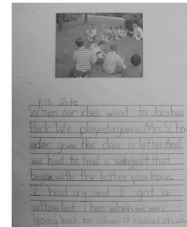


Classroom Rules & Safety



Field Trip

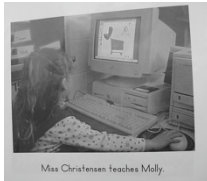
Field Trip to Jacobus Park



Digital Camera & Writing

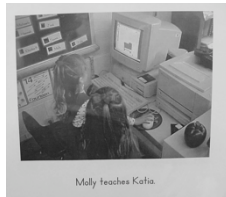
Grade 2
Mrs. Schneider

Classroom Procedures



Miss Christensen teaches Molly.

Cascade Learning



Molly teaches Kolia.

Class Alphabet Chart

Have each child choose a letter. Then, go on a walk around the school or in the neighborhood. When the child finds something that begins with that letter, take a picture of the child with that object. Use the pictures to create a class alphabet chart.

C is for Chalkboard



Document Growth/Changes



Image Source:
<http://cache.eb.com/eb/image?d=100240&rendTypeid=4>

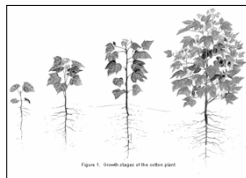


Image Source:
<http://insects.lamu.edu/images/insects/shot/cotton/fig1.jpg>

Take pictures to document growth or changes, such as plants, butterflies, frogs, etc.

Are You Symmetrical?



Head shot image



Remove 1/2 of image & create a mirror of it



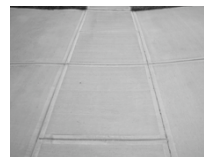
Put the two halves back together

Math Problems

Check out this photos and see what thoughts come to mind. Do you see something different than I see? Think of a problem that you could write about. Use the digital camera to find an object and write a problem to go with it.



Real World Math



Sidewalk parallel & perpendicular lines



Bricks have right angles

Career Reports

Photograph students dressed up as what they want to be when they grow up and use the pictures to illustrate career reports.



Books - Shapes, Colors and Community

Assign pairs of students to walk through the school to find such examples of geometric shapes as circles, triangles, parallel lines, obtuse angles, and so on. Label each photo and create a geometry book.



For younger students, take pictures of easily recognizable signs in your community and assemble the photos into an "I Can Read" book.

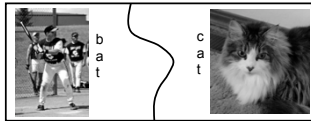


Have students walk through the school or take a neighborhood walk to find examples of different colors. Assemble a color book.



Rhyming Words

Have students take pictures of two objects that rhyme. Create a card of each image and the word to create a matching game.



Illustrate Steps in a Procedure

1.



2.



3.



4.



Image Source: http://www.ehow.com/how_3983_carve-pumpkin.html

Illustrate Perspective in Art



Image Sources: <http://imglib01.imageabase.com/u39/britishbeef/upload25279041/perspective.jpg>
<http://www.uwm.edu/~kahl/images/Weather/Caduceus/perspective.jpg>

Portfolio of student work



GA
Georgia's News About Athletics
 March 13, 2007
 Volume 41

Athletes? Where? In ancient Greece?

We have some interesting news about Olympic Athletes in ancient Greece. If you think that being an athlete in America is hard just think about being one in ancient Greece. Also they have some news that only men could play

Image Source: slp.atma.k12.mn.us

Demonstrate a Phy Ed Exercise



Image Sources: <http://www.treeoffitness.com/Photos/Push%20up%202.jpg>
http://www.ra1.mod.uk/ratregiment/reg1_images/ogac/situp_action.jpg

Graphic Arts - Create a Character



Using a graphics editing program like PhotoShop, create a character a la "Mr. Potato Head" and put parts together to make a new character.

Create Flash Cards of Vocab Words



stalagmite

A deposit formed on the floor of a cave



stalactite

A deposit shaped like an icicle hanging from the roof of a cave

Image Source: http://mouser.org/gallery/helbelowlactive_stalagmite
http://www.physics.utoronto.ca/~rhu/Colloquium04_05/stalactite.jpg

Write an Autobiography

All About Me



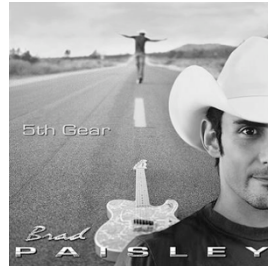
Create a passport



Create a trading card with biographical information about a famous person



Create an advertisement of a music event, person, concept or album cover



Slideshows

Create slideshow to
open or close a unit of
study to visually
engage the students



On all Teacher
laptops in Fall!
Great Program!

Many quick options on MAC and PC and the Web!

Reflection Time

- If you haven't done so, write down some ideas that you saw that you could work into your class or your UNIT PLAN for Summer Academy!

for Summer Academy!
your class or your UNIT PLAN
saw that you could work into
your class or your UNIT PLAN

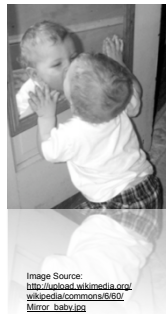


Image Source:
http://upload.wikimedia.org/wikipedia/commons/6/60/Mirror_baby.jpg

"Computer-ese"

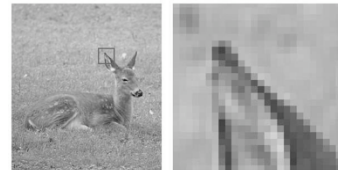


Image Source: <http://photo.net/equipment/digital/basics/pixels.jpg>

Learning Targets:

- Understand the components of a digital image (pixel, resolution, megapixel)

Pixel

Picture Element

Pixel

tiny squares/dots that blend together to make an image

Pixel Example #1



President Ronald Regan Jelly Belly picture courtesy of Flickr user [Randy Son of Robert](#)

Pixel Example #2



Lighthouse pointillism picture by [Roz Springer](#).

Resolution

the number of pixels per square inch (ppi) in an image or display, determines the image quality (good or poor)



Image Source: <http://mpixel.org/wp-content/uploads/2007/09/kompromiss.jpg>

Which area of this picture has the best quality?



Using your eye, which has better quality?

HIGHER Resolution = more pixels per square inch in an image (larger file size, better for print)

LOWER Resolution = less pixels per square inch in an image (better for screen/web, lower file size)

The more pixels in an image...

...the greater the resolution...

...the better the picture quality.

...BUT....

*The **LARGER** the file size!!!*

It's all about how you plan to USE the picture!

PRINT or WEB/SCREEN

PRINTS (inches)

4x6

5x7

8x10

Web/Screen (pixels)

Resolution & Pixel size determine quality of image and

Resolution = # of pixels per inch

WIDTH

HEIGHT

What's your screen resolution?

On Mac, click on "monitor" icon to see what your screen resolution is

Typical Screen Sizes

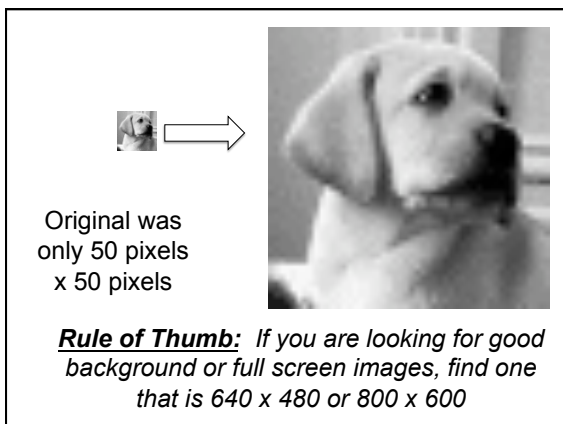
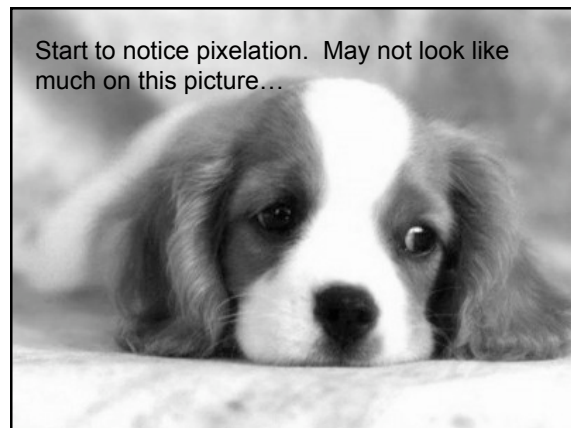
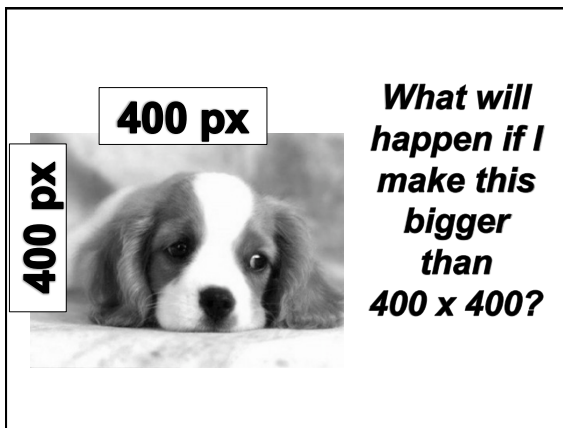
640 x 480

800 x 600

1024 x 768

1280 x 800

Note: You can change yours in Display Preferences area (monitor icon on Mac) (Control Panel on PC)



Most photo websites have information like this in their HELP area.

Print size	Minimum recommended megapixels for print size	Minimum recommended resolution (pixels)
wallets (four 2 x 3" images)	0.09	250 x 375
4 x 6"	0.38	500 x 750
5 x 7"	0.55	625 x 875
8 x 10"	1.25	1000 x 1250
16 x 20"	3.20	1600 x 2000
20 x 30"	6.00	2000 x 3000

Note: Unless you plan to print poster size pictures, you don't need to turn your camera's settings to the highest megapixel or resolution choice!


Kodakgallery.com

Megapixel

pixel count of total pixels in an image

calculated by multiplying horizontal pixels by vertical pixels

1536 px



2048 px

5 in x 7 in Picture

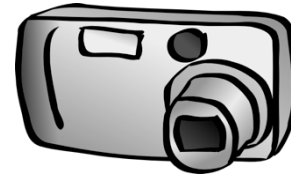
Each 1 inch area holds many pixels of many different colors

Example:
2048 pixels x 1536 pixels
= 3,145,728 or 3 MP

Print size	Minimum recommended megapixels for print size	Minimum recommended resolution (pixels)
wallets (four 2 x 3" images)	0.09	250 x 375
4 x 6"	0.38	500 x 750
5 x 7"	0.55	625 x 875
8 x 10"	1.25	1000 x 1250
16 x 20"	3.20	1600 x 2000
20 x 30"	6.00	2000 x 3000

Most of us don't need to use the HIGHEST settings on our camera. A 2-3 megapixel image will be just fine for using on screen

Digital Photography



Learning Targets:

1. Explore some good photo taking techniques
2. Model an activity you can use with your students

Taking Good Pictures

• Rule of Thirds:

- Tic Tac Toe Board – something in each square
- Focal Point should not be dead center (boring!)
- Something should touch the edge



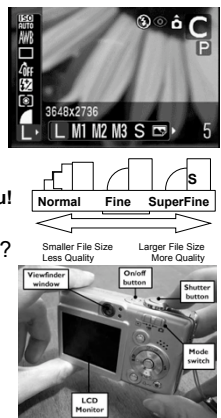
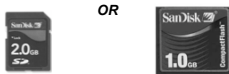
Activity: Kodak Assignment

- Worksheet
- Kodak Website = [10 Photography Tips](#)
- Use website to answer questions on worksheet
- You will use some of these tips in your next activity!



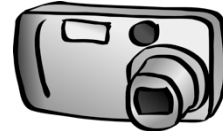
Camera Settings

- Turning on Camera
- Camera Dial
 - Auto vs Play (Button or Dial)
- Where is USB port?
- Setting your picture quality?
 - Get to know your camera menu!
 - Set yours to S for today
- What type of card do you have?
 - SD or CF (Compact Flash)

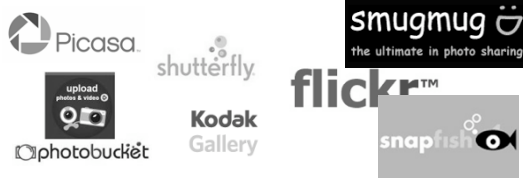


Activity: Photo Scavenger Hunt

- Using some of the tips you just saw, walk around and take at least 10 pictures, no more than 15.
- Ideas: **Shapes? Colors?**
- We will upload your 5 best pictures to a photo album when you get back and look at all you can do with an online photo album



Using An Online Photo Album?



Learning Targets:


1. Download images from camera
2. Upload images to Picasa Web
3. Explore ideas / options for online photos

Downloading Photos from Camera

1. Connect USB cord to camera and to computer
2. Power camera on and put in PLAY mode
 - **MAC:** iPhoto should auto open and ask you to import your photos. Click Import.
 - **PC:** Selection window will appear. Choose Picasa from this window



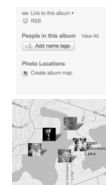
Uploading Photos to Picasa Web

- Go to <http://picasaweb.google.com>
- Login with your Google Account information
- Click  Upload
- Click the create a new album link
- Fill out Album Info
- Browse and find your 5 photos
- Click upload when finished

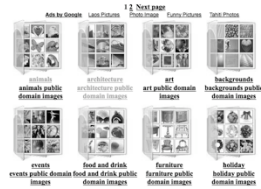


Online Albums

- Sharing with others (if Albums are PUBLIC)
 - Your public site <http://picasaweb.google.com/chadkafka>
 - (your username)
- Embedding albums or slideshows in website / wiki / blog
 - Click LINK TO THIS ALBUM to see choices for linking, embedding
 - CREATE ALBUM MAP to drop your pictures on a Google Map to create an interactive Map!



Where to get images from?



Learning Targets:

1. Explore some ROYALTY FREE image sharing sites
2. Understand how to properly cite an image using MLA style

Royalty Free Sites

- All linked on WIKI! Bookmark some of your favorites. Will be there after you get your laptop back
- Royalty Free
- Creative Commons
- Citing if copyrighted image
 - How many images can you use from a collection?

Tips To Make File Size Smaller

1. What are you using images for? (print or screen?)
2. Make adjustments on your camera (*more later*)
3. Check image file size? Can you decrease to make things run smoother? (aim for 150 KB, under 50 kb if going on web for viewing only)
4. If you have a large image, reduce it in a program like iPhoto, Graphic Converter, Picasa, PhotoShop OR better yet...
5. Take a SCREENSHOT of image and paste it
 - Mac: $\text{⌘} + \text{CTRL} + \text{SHIFT} + 3$ = whole screen
 - Mac: $\text{⌘} + \text{CTRL} + \text{SHIFT} + 4$ = selected area
 - Must then PASTE to program (Word, Ppt)
 - PC: PRNT SCREEN key takes screen pic
 - Must then PASTE to program (Word, Ppt)
 - May have to do some CROPPING

Wrapping Up

- Put ticket in pitcher for CAMERA drawing!
- Please take Survey online through wiki
- Think about how to incorporate some of the things we talked about into your UNIT PLAN